

ACCESSION NR: AP4037603

\$/0056/64/046/005/1880/1890

AUTHORS: Berezin, Yu. A.; Karpman, V. I.

TITLE: Theory of nonstationary finite amplitude waves in a rarefied plasma

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 5, 1964, 1880-1890

TOPIC TAGS: plasma wave propagation, nonsteady flow, nonuniform rarefied plasma, plasma source

ABSTRACT: As a continuation of earlier work by one of the authors (N. P. Popov, Zhetf v. 44, 1679), a formula is derived for $\gamma \nu$ correlation in the case of allowed muon capture by the BlO nucleus, with allowance for the hyperfine splitting of the mesic-atom levels. The reason for the investigation is that capture by BlO is the only allowed capture of a muon by a light stable nucleus which can be experimentally verified, and the earlier investigation has shown that

Card 1/2

ACCESSION NR: AP4037603

the $\gamma \nu$ correlation is very sensitive to the contribution to the pseudoscalar interaction in capture of an unpolarized muon. Several hypothetical experiments are proposed to check on the theoretical conclusions, and the limitations of the experiments are discussed. It is also shown that the $\gamma \nu$ correlation is weakly dependent on the nuclear structure. "The authors are deeply grateful to I. M. Shmush-kevich for interest in the work, and also to A. I. Mukhin and R. M. Sulyayev for useful discussions." Orig. art. has: I figure and 12

ASSOCTATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR (Physicotechnical Institute AN SSSR)

SUBMITTED: 07Dec63

DATE ACQ: 09Jun64

ENCL: 00

SUB CODE: ME

NR REF SOV: 004

OTHER; 006

Card 2/2

L 14299-65 EEC(b)-2/EPA(w)-2/ENG(k)/EWT(1)/EEC(t)/EPA(ap)-2/T/EWA(m)-2 Pi-4/Po-4/Pz-6/Pab-10 SSD(b)/AEDC(a)/BSD/AFWL/AEDC(b)/SSD/ASD(p)-3/AFETB/ RAEM(a)/ESD(ga)/ESD(t)/IJP(c) AT ACCESSION NR: AP4047924 S/0056/64/047/004/1552/1574

AUTHORS: Al'tshul', L. M.; Karpman, V. I.

B

TITLE: Wave kinetics in a weakly turbulent plasma

SOURCE: Zhurnal eksperimental noy i teoreticheskoy fiziki, v. 47, no. 4, 1964, 1552-1574

TOPIC TAGS: kinetics, turbulent plasma, plasma wave propagation, plasma decay, plasma oscillation, symmetry relation, nonlinear interaction, plasmon, photon interaction

ABSTRACT: A kinetic equation is derived for waves in a weakly turbulent plasma in a form that leads to simple symmetry relations for the different terms of the equation. This makes it possible to obtain a set of symmetry relations for the kernel of the kinetic equation, and to derive certain conservation laws that facilitate the investigation of the wave kinetics in many cases. It is shown in par-

Card 1/3

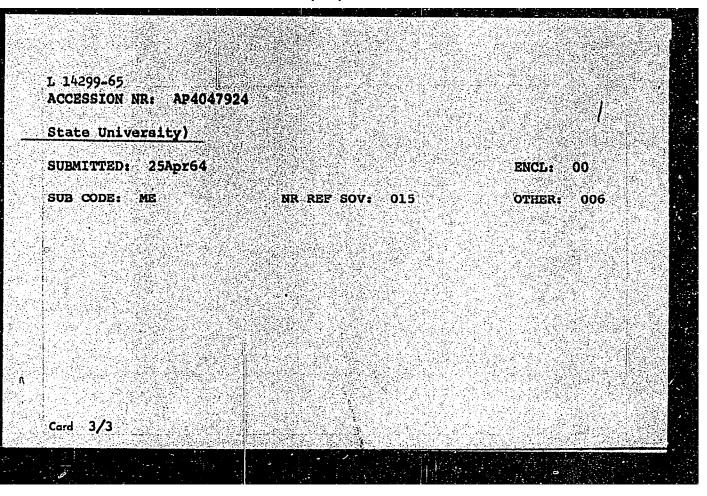
L 14299-65 ACCESSION NR: AP4047924

2.

ticular that if wave "decays" are impossible, then under certain conditions, which are satisfied in the majority of cases of interest, the nonlinear interaction cannot lead to a change in the total number of waves. The kinstic equation for the waves and the symmetry relations are derived first in the case of potential oscillations. This is followed by examination of the conservation laws that follow from the symmetry relations, which are then shown to be valid, together with the conservation laws obtained for the potential oscillations, in the general case of oscillations of arbitrary polarization. The derivations are illustrated with examples dealing with the conservalaws in a nonlinear interaction between potential oscillations and a plasma with and without a magnetic field, and the interaction between plasmons and photons in a plasma without magnetic field. "The authors thank A. A. Galeyev and R. Z. Sagdeyev for fruitful discussions." Orig. art. has: 102 formulas.

ASSOCIATION: Novosibirskiy gosudarstvenny*y universitet (Novisibirsk

Card 2/3



ACCESSION NR: AP4043833

\$/0020/64/157/005/1088/1091

AUTHORS: Galeyev, A. A.; Karpman, V. I.; Sagdeyev, R. Z.

TITLE: Concerning one solvable problem in the theory of plasma

turbulence

SOURCE: AN SSSR. Doklady*, v. 157, no. 5, 1964, 1088-1091

TOPIC TAGS: turbulent plasma, kinetic equation, spectral energy distribution, electron ion plasma, plasma oscillation, electron oscillation, ion oscillation

ABSTRACT: The authors investigate several particular classes of problems involving the spectrum of the turbulent pulsations in a plasma. In view of the nonlinearity of the integral kinetic equation for the wave spectral energy density, all the attempts made heretofore consisted only of crude estimates. It is shown that the problem of nonlinear time evolution of a spectrum of Langmuir electron oscilla-

Card 1/2

ACCESSION NR: AP4043833

tions in a homogeneous plasma without a magnetic field can be solved analytically. The initial integral equations are derived by a perturbation-theory method described by A. A. Vedenov et al. (Yaderny*y sintez, v. 1, 82, 1961) and by W. Drummond and D. Pines (paper no. 134, Salzburg Conference, September 1961). The result is a complete system of equations describing the turbulent kinetics of a rarefied plasma without a magnetic field, accurate to terms quadratic in the energy. The nonlinear relaxation of the electron plasma oscillations is then described, and it is shown that the principal role in the nonlinear relaxation of the electronic oscillations is played by the ions. Orig. art. has: 13 formulas. This report presented by M. A. Leontovich.

ASSOCIATION: Novosibirskiy gósudarstvenny*y universitet (Novosibirsk State University)

SUBMITTED: 20Feb64

ENCL: 00

SUB CODE: ME

NR REF SOV: 010

OTHER: 001

Card 2/2

Theory of nonatablonary surface waves. Affi no.54135-137 (MIRA 1894)

AL'TSHUL', L.M.; KARPMAN, V.I.

Kinetics of waves in a weakly turbulent plasma. Thur. eksp. i
teor. fiz. 47 no.4:1552-1574 0 '64.

(MIRA 18:1)

1. Novosibirskiy gosudarstvennyy universitet.

ALTERUL!, L.M.; ERREMAN, V.I.

Theory of nonlinear esciliations in a collisionless plasma.

Zhur. eksp. i teor. fiz. 49 no.2:515-528 Ag *165. (MIRA 18:9)

1. Novositirskiy gosudaratvennyy universitet.

5347-66 EWT(1)/ETC/EP CESSION NR: AP5021116	F(n)-2/EWG(m)/EPA(w)-2		
* 1f		73	i (*) i,
THOR: Al'tshul', L. M.;	Karpman, V. I.//, 53	stanless plasma	
TIE: Theory of nonlinear	oscillations in a collis	10111000 Paris	
C COD		fiziki, v. 49, no. 2, 1965,	
which distribution. TUP	offent breeze	ticle, distribution function,	
STRACT: A general pertu	rbation theory is develop	ed for nonlinear plasma ocilla- ns regarding the randomness of the oscillation field. The	
ne phases. The formal exuithors separate and sum, erms to obtain the kinetiff the principal sequences escribe the reaction of t	in the general series of c equations for weakly-no of the secular terms lea he oscillations on the di	the theory, sequences of secular nideal systems. The summation ds to quasilinear equations that stribution function of the plas-	
ne phases. The formal ex- uthors separate and sum, erms to obtain the kineti- f the principal sequences escribe the reaction of t a particles. The applica- ions whatever with respec-	in the general series of c equations for weakly-no of the secular terms lea he oscillations on the dibility of these equations to the wave packet, and	the theory, sequences of secular nideal systems. The summation ds to quasilinear equations that stribution function of the plasis not limited by any condition the width is sufficiently those of the quasilinear theory	
ne phases. The formal ex- uthors separate and sum, erms to obtain the kineti- f the principal sequences escribe the reaction of t a particles. The applica- ions whatever with respec-	in the general series of c equations for weakly-no of the secular terms lea he oscillations on the dibility of these equations to the wave packet, and	the theory, sequences of secular nideal systems. The summation ds to quesilinear equations that stribution function of the plasis not limited by any condition the width is sufficiently.	

Card 2APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R00072083000

ACC NR. AP7004546	SOURCE CODE: UR/0056/66/053./003/0907/0914
AUTHOR: Karpman, V. I.	
ORG: Novosibirsk State Univer	esity (Novosibirskiy gosudarstvennyy universitet)
a said colutions of t	the equations for plasma oneillations
SOURCE: Zhurnal eksperimental	l'noy i teoretichoskoy fiziki, v. 51, no. 3, 1966, 907-914
TARTE MAGG. coulomb collision	n. plasma oscillation
ABSTRACT: The effect of Coul- and decrements of attenuation solutions) is considered. In decay at slower rate than osc Coulomb collisions of a very result in a very rapid decay	omb collisions on plasma oscillations with Trequencies which depend on the initial perturbation ("special" total absence of collisions such oscillations may illations with a Landau decrement. It is shown that low frequency (much smaller than the Landau decrement) of the special solutions. The author thanks R. Z. slons. Orig. art. has: 34 formulas. [JPRS: 38,695]
SUB CODE: 20 / SUBM DATE:	07Apr66 / ORIG REF: 002 / OTH REF: 004
	0926 1373
Card 1/1	0920 1313

ACC NRI AP6037086

SOURCE CODE: UR/0056/66/051/005/1557/1568

AUTHOR: Berezin, Y. A.; Karpman, V. I.

ORG: Novosibirsk State University (Novosibirskiy gosudarstvennyy universitet)

TITLE: Nonlinear evolution of disturbances in plasmas and other dispersive media

SOURCE: Zhurnal eksperimental noy i teoreticheskoy fiziki, v. 51, no. 5, 1966, 1557-1568

TOPIC TAGS: plasma instability, plasma wave propagation, plasma magnetic field, nonlinear plasma, asymptotic solution

ABSTRACT: This is a continuation of earlier work (ZhETF v. 46, 1880, 1964), in which a formula of the type first given by D. J. Korteweg and G. de Vries (Phil. Mag. v. 39, 442, 1895) was derived for the case of waves propagating in a plasma at an angle to the magnetic field. In the present paper the authors clarify some characteristic features of different types of the solutions obtained when such an equation is used to describe the evolution of nonlinear disturbances in a plasma or in other dispersive media. The condition for the decay of the disturbances into various types of solutions are obtained. A similarity principle is formulated for the Korteweg-de Vries equation and the physical meaning of self-similar solutions of this equation is explained. Some general asymptotic relations are obtained for nonstationary solutions.

Card 1/2

	/	1	and a "tail"	d to the car	se when th	eg Aose e sorni	nacket o	sus of au fsmall a	individu molitudes	
Cond	itions	under	r which non-	soliton sol	utions are	obtain	ed. and u	nder which	the ini	tial
pert	urbati	on bre	eaks up into	a smaller (or a large he "pure-s	r numbe	r of soli solution	tons are s are ex	determine clained.	orig.
arv.	pos:	4 fi	gures and 41	formulas.				-	•	
SUB	CODE:	20/	SUBM DATE:	11Jun66/	ORIG REF:	005/	OTH REF:	007		
.		- •			,					
				•				•		ļ
					·		*;			
			· · · · · · · · · · · · · · · · · · ·	•						
								•		
									4.	

L 27259-65 EMT(1)/EMP(w)/EPA(sp)-2/EMG(w)/EMA(d)/EPR/SPA(w)-2/T-2/FCS(k)/EMA(w)-2/EMA(h) Pd-1/Pe-5/Ps-U/P1-U/Pab-10/Pae-2 LIP(c) UM

ACCESSION NR: AT4049110

8/2555/64/010/000/0036/0057

AUTHOR: Karpman, V. I.

TITLE: Hydromagnetic shock waves

με₋₁ 6*1

SOURCE: AN SSSR. Astronomicheskiy sovet. Voprosy kosmogonii, v. 10, 1964. Problemy magnitnoy gidrodinamiki i kosmicheskoy gazodinamiki (Problems in magnetio hydrodynamics and cosmic gos dynamics), 36-57

TOPIC TAGS: <u>astrophysics</u> magnetohydrodynamics, cosmic gas dynamics, shock wave, collisionless shock wave, hydromagnetic shock wave, plasma, magnetic field

ABSTRACT: In the study of magnetohydrodynamic shock waves it is necessary to distinguish two cases which differ sharply from one another. In the first case the gas is a completely or partially ionized plasma with a mean free path which is small in comparison with the characteristic dimensions in which the mean parameters of the gas vary. Hydromagnetic shock waves in such a medium, possessing a number of specific characteristics associated with the presence of a magnetic field, at the same time differ little from ordinary shock waves without a field. The other case is the propagation of shock waves in rarefled plasma where the mean free path is great in comparison with the characteristic lengths of change of its parameters. From the point of view of classical gas dynamics,

L 27259-65

ACCESSION NR: AT4049110

which teaches that the width of the shock wave front should be greater than the length of the free path, shock waves cannot be formed in such plasma. However, astrophysical data indicate the existence of shock waves with a front width much less than the mean free path of the particles. Theory has shown that in this case so-called collective processes in plasma play the principal role in the formation of shock waves. In this lecture, based in large part on the 29 cited sources, the first part discusses classical hydromagnetic shock waves in a dense conducting gas and the second part analyzes collisionless shock waves in a strong magnetic field; turbulent lecay of the cacillator profile; strong shock waves in rarefled plasma; shock waves without a magnetic field and in a weak field in rarefled plasma). "In conclusion, the author wishes to thank R. Z. Sagdeyev for numerous fruitful discussions of the considered problems". Orig.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: ME, AA

NO REF SOV: 018

OTHER: 009

Card 2/2

AUTHOR:	Karpman, V.			00/65/000/000/0	· ・ ・ ・ ・ ・ ムカ::	1
ORG: I	<u>Institute of Mic</u> ut yadernoy fiz	lear Physics, S	<u>iberian Der</u> otdeleniya	artment an sss An sssr)	62 8 AH	
a plasm	a distillear th	e'ory of propaga	tion of a m	onochromatic wa	ive in	
SOURCE: Doklady cheskoy	AN SSSR. Sibi 1965. Kvazil volny v plazme	rakoye otdeleni ineynaya teoriya , 1-15	ye. Institu i rasprostr	.yadernoy fizi neniya monokhr	k1. omati-	
LOPIC TA	ing Line Line and Line	tic radiation, listribution, di lield		医国际影响 医克里克氏 医克里克氏	3.5 - Hall 10 - 11	
BSTRACT ongitud he form n extern nto acco	The author of inal oscillation of two ideal grant charge of sount the reacti	evelops a nonling in a plasma, rids which transpectfied density on of the wave constitues appropriate to be monochrome	near theory excited by smit partic y is applie	for the propag an external so les freely and 1. The theory	gation of ource in on which takes	

ACC NR. AT6012263 lations is assumed to be small enough to neglect higher harmonics. for the case of a monochromatic wave. The equation is present turbation theory. The author considers also the electrostatic field resulting from the gradient of the radiation pressure of the wave and from the accompanying charge separation. The electrostatic field is linear effects much earlier than the fundamental harmonic and responds by the quasithanks L. E. Gurevich, V. I. Perell, and R. Z. Sagdevey for interest SUB CODE: 20/ ORIG REF: 004/ OTH REF: 008	oma,
Card 2/2 B ←	

KARPMAN, V.L.; ABRIKOSOVA, M.A.; GLEZER, G.A.

Hydrodynamic mechanisms of increased arterial blood pressure in hypertension. Terap.arkh. 34 no.3:28-35 162. (MIRA 15:3)

1. Iz laboratorii klinicheskoy fiziologii (zav. - akad. AN UkrSSR prof. Ye.B. Babskiy) Instituta normal'noy i patologicheskoy fiziologii (dir. - deystvitel'nyy chlen AMN SSSR prof. V.V. Parin)

AMN SSSR i Instituta terapii (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Myasnikov) AMN SSSR.

(HYPERTENSION) (BLOOD PRESSURE)

KOLESNIKOV, S.A.; KARPMAN, V.L.; PIROGOV, A.I.

Dynamocardiographic study of the functional state of the heart in lung diseases. Grud. khir. 2 no.4:51-56 J1-Ag '60. (MIRA 15:6)

1. Iz laboratorii fiziologii krovoobrashcheniya (zav. - akademik Ye.B. Babskiy) i vtorogo legochnogo otdeleniya (zav. - doktor med.nauk S.A. Kolesnikov) Instituta grudnoy khirurgii AMI SSSR (dir. - akademik A.N. Bakulev). Adres avtorov: Moskva, Loninskiy prospekt, d.8, Institut grudnoy khirurgii AMI SSSR.

(LUNCS-DISEASES)

(HEART BEAT)

KARPMAN I.L.
BABSKIY, Ye.B.; VINOGRADOVA, T.S.; KARPMAN, V.L. Application of cardiohemodynamography in surgical clinical practice. Khirurgiia no.1:60-67 Ja 154. 1. Iz laboratorii Akademii meditsinakikh nauk SSSR pri fakulitetskoy khirurgicheskoy klinike im. S.I.Spasokukotskogo (zaveduyushchiy deystvitel'nyy chlem Akademii meditsinskikh nauk SSSR professor A.N.Bakulev) II Moskovskogo meditsinskogo instituta im. I.V. Stalina. (Cardiovascular system)

KARPMAN, V.L.; DAMIR, Yo.A.

Change in cardiac hemodynamographic curves in combined mitral defect. Terap.arkh. 27 no.3:26-33 155. (MLRA 8:9)

1. Iz laboratorii Akademii meditsinskikh nauk SSSR pri fakul'a tetskoy khirurgicheskoy klinike (dir. deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR prof. A.N' Bekulev) II Moskovskogo gosudarstvennogo meditsinskogo instituta imeni I.V.Stalina.

(MITRAL STEMOSIS, physiology, heart, henodynamic changes)

KARPMAN, V.L., VOSKANOV, M.A.

Cardichemodynamographic data on the reaction to controlled physical effort in convalencents following myocardial infarction.

Terap. arkh. 27 no.7:40-48 '55. (MLRA 9:1)

1. Iz laboratorii Akademii meditsinskikh nauk SSSR pri fakul'tetskoy khirurgicheskoy klinike II Moskovskogo meditsinskogo instituta imeni IV Stalina (dir.--deystvitel'nyi chlen AMN SSSR A.N. Bakulev) i kafedry l-y terapii TSentral'nogo instituta usovershenstvovaniya vrachey (zav.--deystvital'nyy chlen AMN SSSR M.S. Vovsi) (EXERCISE, effects,

on myocardial infarct convalencents) (MYOCARDIAL INFARCT.

eff. of controlled exercise on convalescents)

STEPANYAN-TARAKANOVA, A.M.; TARAKANOV, Ye.I.; KARPMAN, V.L., redaktor; BREZANOVSKAYA, L.Ya., redaktor; YUSFINA, N.L., tekhnicheskiy redaktor.

[Metabolism and nutrition] Obmen veshchestv i pitanie. Moskva, Gos. izd-vo kullturno-prosvetitellnoi lit-ry, 1956. 44 p.(Bibliotechka v pomoshchi lektoru, no.6) (MIRA 9:6) (METABOLISM) (NUTRITION)

CIA-RDP86-00513R000720830002-9 "APPROVED FOR RELEASE: 06/13/2000

USSR/Human and Animal Physiology (Normal and Pathological).

T-4

Heart.

: Ref Zhur - Biol, No 16, 1958, 74733 Abs Jour

Author : Babskiy, Ye.B., Karpman, V.L.

Inst : Temporary Correlations Between Electrical and Mechanical Title

Phenomena of the Activity of the Ventricles of the Human

Heart.

: Probl. sovrem. fiziol. nervn. i myshechn. sistem, Tbilisi, Orig Pub

AN GruzSSR, 1956, 501-513.

Abstract : No abstract.

Card 1/1

```
Cardiohemodynamography showing the effectiveness of surgery for mitral stenosis. Klin.med. 34 no.5:36-43 My '56. (MLRA 9:10)

1. Iz laboratorii Akademii meditsinskikh nauk SSSR pri fakul'tetskoy khirurgicheskoy klinike II Moskovskogo meditsinskogo instituta imeni I.V.Stalina.

(MITRAL STENOSIS, surgery.

cardiohemodynamography of results (Rus))

(BALLYSTOCARDIOGRAPHY,

cardiochemodynamography after mitral stenosis surg.

(Rus))
```

BABSKIY, R.B., okademik; KARPMAH, V.L.

Relation between the time of ventricle contraction and cardiac rhythm. Dokl. AN SSSR 109 no.2:407-410 J1 156. (MIRA 9:10)

1. Akademiia nauk USSR (for Babskiy). 2. Institut grudnoy khirurgii Akademii meditsinskikh nauk SSSR.
(HEART)

KARPMAN, V. L., Cand Med Sci -- (diss) "Dynamocardiography. (Its theoretical basis and clinical application!)" Mos, 1957. 16 pp (Acad Med Sci USSR), 200 copies (KL, 16-58, 123)

-/02-

Waing dynamocardiography in physiological and clinical examinations.

Vest. AMN SSSR 12 no.4:71-78 '57. (MIRA 10:10)

(HNART--SXAMINATION)

KARPMAN, V.L.

Absolute and relative duration of ventricular systolic phases [with summary in English]. Biul.eksp.biol. i med. 43 no.5:9-12 My '57.

(MIRA 10:10)

1. Iz laboratorii fiziologii krevoobrashcheniya i dykhaniya (zav. - deystvitel'nyy chlen AMN USSR Ye.B.Babskiy) Instituta grudnoy khirurgii (dir. - deystvitel'nyy chlen AMN SSSR prof. A.N.Bakulev) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR prof. A.N.Bakulevym.

(HEART, physical. ventric. systolic phases, absolute & relative duration (Rus))

BABSKIY, Ye.B., KARPMAN, V.L.

Essential difference between ballistocardiographic and dynamocardiographic methods [with summary in English]. Biofizika 3 no.5:596-606 '58 (MIRA 11:10)

1. Institut grudnoy khirurgii AMN SSSR, Moskva.
((BALLISTOCARDIOGRAPHY, differences with dynamocardiography (Rus))
(HEART, dynamocardiography, differences from ballistocardiography (Rus))

COUNTRY CATEGORY : USSR

: Pharmacology and Toxicology. Cardiovascular

Agents

ABS. JOUR.

: RZhBiol., No. 1 1959, No. 4585

AUTHOR

: Vovsi, H. S.; Karpman, V. L.; Khody-Zade, H. Kh.

INST. TITLE

: On the Pharmacodynamics of Nitroglycerin

ORIG. PUB. : Terapevt. arkhiv, 1958, 30, No 1, 3-9

ABSTRACT

: 16 healthy and 63 individuals affected with stenocardia were examined by the method of dynamocardiography. Dynamocardiograms were recorded after 5 minutes of rest and 1, 2, 5, and 10 minutes following administration of 2 drops of 1% alcoholic solution of nitroglycerin (N). Observations showed that under the effect of N the duration of the phase of isometric contraction

CARD:

1/3

27

CATE OF THE ROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000720830002-9

ARS. JOHR. : RZhBiol., No. 1 1959, No. 4585

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT contid. : and expulsion of blood from the ventricles is shortened and that in healthy persons these changes correspond to the degree of increase of frequency of tachycardia, while in sick individuals the duration of isometric contraction is comparatively prolonged. The changes of the duration of phases show that under the influence of N cardiac muscle begins to execute greater work than at rest. In healthy persons, this is expressed by an increase of the stroke volume,

CARD:

2/3

ABRIKOSOVA, M.A.; KARPMAN, V.L. (Moskva)

Normal standards of the sphygmogram and the velocity of the pulse wave in the peripheral vessels. Pat.fiziol. i eksp.terap. 3 no.6: (MIRA 13:3)

1. Iz laboratorii klinicheskoy fiziologii (zaveduyushchiy - akademik AN USSR prof. Ye. B. Babskiy) Instituta normal'noy i patologicheskoy (PULSE)

BABSKIY, Ye.B.; IVANITSKAYA, I.N.; KARPMAN, V.L.

Mechanism of cardiac function during inspiration and expiration;
dynamocardiographic investigations [with summary in English].

Biofizika 4 no.2:198-203 '59. (MIRA 12:4)

1. Institut grudnoy khirugii AMN SSSR, Moskva.

(RESPIRATION, physiol.

eff. of expiration & inspiration on heart funct. (Rus))

(HRART, physiol.

eff. of expiration & inspiration (Rus))

BABSKIY, Ye.B.; KARPMAN, V.L.; PETROV, G.M.; SKACHKOVA, A.I.

Use of an electronic differentiating unit in physiological research. Biofizika 4 no. 6:743-749 159: (MIRA 14:4)

1. Institut normal'noy i patologicheskoy fiziologii Akademii meditsinskikh nauk SSSR, Moskva.

(ELECTRONIC APPARATUS AND APPLIANCES) (PHYSIOLOGY—MESEARCH)

Left auricular pressure in mitral disease, Terap, arkh. 31 no.2:3-11 F '59.

Left auricular pressure in mitral disease, Terap, arkh. 31 no.2:3-11 F '59.

(MIRA 12:1)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (dir. - deystvitel'nyy chlen AMN SSSR prof. A.N. Bakulev) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova i fiziologicheskoy laboratorii (zav. - akademik AN USSR prof. Ye.B. Babskiy) Instituta grudnoy khirurgii AMN SSSR.

(MITRAL VALVE, dis.

left auric. pressure changes (Rus))
(BIOOD PRSSSUER,

left auric. pressure in mitral dis. (Rus))

17(1)

Card 1/3

AUTHORS: Babskiy, Ye. B., Academician AS UkrSSR, SOV/20-125-5-58/61

Karpman, V. L.

TITLE: An Analysis of the Phases of Cardiac Contractions According to

Dynamocardiographic Data (Ob analize faz serdechnogo

sokrashcheniya po dannym dinamokardiografii)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 5, pp 1166- 1169

(USSR)

ABSTRACT: The three research workers mentioned in reference 1 came to the

conclusion that the intervals of the dynamocardiogram correspond to the phases of the heart cycle. This was confirmed later (Refs 2,3). However, data were collected according to which some elements of the dynamocardiogram are to be estimated differently from those of

reference 1. For this reason the authors analyzed anew the systolic complex of the dynamocardiogram and found more precise

criteria for estimating the duration of the systole phase.

Material and method. 85 persons were examined, 25 were sound and 60 ill (35 persons suffered from mitral stenosis,

5 mitral insufficiency, etc.). The dynamo- and electro-

phonocardiogram, as well as the curve of the pulse beat of the

carotid artery were recorded synchronously. Figure 1 shows the

An Analysis of the Phases of Cardiac Contractions According SOV/20-125-5-58/61 to Dynamocardiographic Data

> interrelations with respect to time of these results. Table 1 gives the average duration of the intervals of the systolic complex of the dynamocardiogram in seconds in the case of sound and ill persons. Table 2 shows the same for the phases of the systole of the heart ventricle after a polycardiographic examination. The authors drew the following conclusion: dynamocardiography permits a detailed phase analysis of the systole of the left ventricle. The time between the point q of the dynamocardiogram (or the peak Q of the ECG) and the point B corresponds to the duration of the electro-mechanical period of the ventricle (phase of form change). The time between the point B and z corresponds to the phase of isometric contraction, whereas the time between z and E corresponds to the phase of the pumping out from the left ventricle. The sum of the intervals II, III, and IV (B - E) corresponds to the duration of the mechanical systole. There are 1 figure, 2 tables, and 11 references, 4 of which are Soviet.

ASSOCIATION:

Institut normal'noy i patologicheskoy fiziologii Akademii meditsinskikh nauk SSSR (Institute of Normal and Pathological

Card 2/3

Physiology of the Academy of Medical Sciences USSR)

APRIKOSOVA, M.A. (Moskva, A-55, Novoslobodskaya ul., d.57/65,kv.39) KARPMAN, V.L.

Change in the hemodynamics of the greater circulation following mitral commissurotomy. Grud.khir. 2 no.2: 43-47 Mr-Ap 60.

(MIRA 16:7)

1. Iz laboratorii klinicheskoy fiziologii (zav.-akademik AN UkrSSR Ye.B.Babskiy) Instituta normal'noy i patologicheskoy fiziologii AMN SSSR (dir.-deystvitel'nyy chlen AMN SSSR V.N.Chernigovskiy) fakul'tetskoy khirurgicheskoy kliniki (dir.akademik A.N.Bakulev) II Moskovskogo meditsinskogo instituta i Instituta grudnoy khirurgii AMN SSSR (dir.-prof. S.A.Kolesnikov)

(BLOOD—CIRCULATION, DISORDERS OF)
(MITRAL VALVE—SURGERY)

KARPMAN, V.L.

Analysis of the Kinematics of the human body during cardiac contractions; vectorballistocardiographic study. Biofizika 5 no. 4:430-437 '60. (MIRA 13:12)

1. Institut normal'noy i patologicheskoy fiziologii AMN SSSR, Moskva.

(BALLISTOCARDIOGRAPHY) (VECTORCARDIOGRAPHY)

BABSKIY, Ye.B.; VENEDIKTOV, A.B.; KARPMAN, V.L.; TISHCHENKO, M.I.

Dynamocardiograph. Biofizika 5 no. 5:620-626 :60. (MIRA 13:10)

1. Institut normal'noy i patologicheskoy fizilogii ANN SSSR,

Moskva i Konstruktorsko-tekhnologicheskoye byuro "Biofizpribor",

Leningrad. (CARDIOGRAPHY)

KARPMAN, V.L.; SAVEL'YEV, V.S.

Dynamics of contractions of the right ventricle of the human heart. Fiziol. zhur. 46 no.3:310-317 Mr '60. (MIRA 14:7)

1. From the Laboratory of Clinical Physiology of the Institute of Normal and Pathological Physiology and the Faculty Surgical Clinic of the N.I.Pirogov Second State Medical Institute.

(HEART)

KARPMAN, V.L.; IOFFE, L.A.

Physiological analysis of the transverse dynamocardiogram. Biul. eksp. biol. i med. 50 no. 11:8-13 N '60. (MIRA 13:12)

l. Iz laboratorii klinicheskoy fiziologii (zav. - akademik AN USSR Ye.B. Babskiy) Instituta normal'noy i patologicheskoy fiziologii (dir. - deystvitel'nyy chlen AMN SSSR V.N. Chernigovskiy) AMN SSSR, Moskva.

(HEART) (ELECTROCARDIOGRAPHY)

BABSKIY, Ye.B., akademik; IOFFE, L.A.; KARPMAN, V.L.

Frontal vectordynamocardiogram. Dokl.AN SSSR 134 no.2:485-488 S '60. (MIRA 13:9)

1. Institut normal'noy i patologicheskoy fiziologii Akademii nauk SSSR. 2. AN USSR (for Babekiy).
(VECTORCARDIOGRAPHY)

BABSKIY, Ye. B. and KARPMAN, V.L.

Institute of Normal and Pathological Physiology, Academy of Sciences USSR, Moscow - "Dynamocardiography"

Report to be submitted for the 4th Intl. Conf. on Medical Electronics, New York, N.Y., 16-21 July 1961

KARPMAN, V.L.

Hydrodynamic regulation mechanisms of mean arterial pressure.

Dokl.AN SSSR 138 no.5:1231-1233 Je '61. (MIRA 14:6)

l. Institut normal'noy i patologicheskoy fiziologii Akademii meditsinskikh nauk SSSR. Predstavleno akademikom V.N.Chernigovskim. (BLOOD, PRESSURE)

BABSKIY, Ye.B.; KARPMAN, V.L.; SADOVSKAYA, G.V.; TISHCHENKO, M.I.

Physicophysiological study of the high-frequency ballistocardiogram of a healthy man. Kardiologiia 2 no.1:44-52 Ja-F *162. (MIRA 15:5)

1. Iz laboratorii klinicheskoy fiziologii (zav. - akademik AN USSR Ye.B.Babskiy) Instituta normal'noy i patologicheskoy fiziologii ANN SSSR (dir. - deystvitel'nyy chlen ANN SSSR prof. V.V.Parin) i Instituta terapii ANN SSSR (dir. - deystvitel'nyy chlen ANN SSSR prof. A.L. Myasnikov).

(BALLISTOCARDIOGRAPHY)

本 本 中心 智力等於4、以前1996年於1947年。1976年

KARPMAN, V.L., kand.med.nauk; ABRIKOSOVA, M.A.; IOFFE, L.A.; OLENINA, K.S.; SADOVSKAYA, G.V.

Contractility of the myocardium in cardiac aneurysms.

Kardiologiia 2 no.3:35-40 My-Je *62. (MIRA 16:4)

1. Iz laboratorii klinicheskoy fiziologii (zav. - rademik AN UkrSSR Ye.B.Babskiy) Instituta normal'noy i pa'ologicheskoy fiziologii (dir. - deystvitel'nyy chlen AMN SSSR V.V.Parin) AMN SSSR i Instituta terapii (dir. - deystvitel'nyy cheln AMN SSSR A.L.Myasnikov) AMN SSSR. (HEART-DISEASES) (ANEURYSMS)

ABRIKOSOVA, M.A.; KARPMAN, V.L. (Moskva)

Greater blood circulation and some mechanisms of compensation in patent ductus arteriosus. Pat. fiziol. i eksp. terap. 6 no.1:22-28 Ja-F '62. (MIRA 15:3)

l. Iz laboratorii klinicheskoy fiz.ologii (zav. - deystvitel'nyy chlen AN USSR Ye.B. Babskiy) Instituta normal'noy i patologicheskoy fiziologii (dir. - deystvitel'nyy chlen AMN SSSR V.V. Parin) AMN SSSR i fakul'tetskoy khirurgicheskoy kliniki (dir. - akademik A.N. Bakuley) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.

(DUCTUS ARTERICSUS) (BLOOD-CIRCULATION)

BABSKIY, Yevgeniy Borisovich; KARRMAN, Viktor L'vovich; GOLUEYKH,
L.I., red.; MATVEYEVA, E.M., tekhn. red.; CHULKOV, I.F.,
tekhn. red.

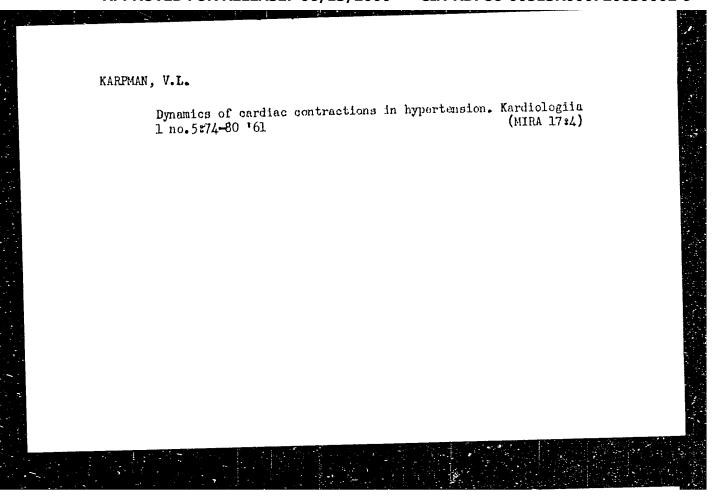
[Dynamocardiography] Dinamokardiografiia. Moskva, Medgiz,
1963. 167 p. (NIRA 16:12)

(CARDIOGRAPHY)

IL'IN, I.V.; KARPMAN, V.L.; SAVEL'YEVA, G.M.

Dynamics of heart activity in the fetus and newborn the infant. Vop. okhr. materin. dets. 8 no.1:25-31 '63 (MIRA 17:2)

1. Iz kafedry akusherstca i ginekologii (zav. - chlen-korrespondent ANN SSSR L.S. Persianov) II Moskovskogo meditsinskogo instituta imeni Pirogova i laboratorii klinicheskoy fiziologii (zav. - akademik AN UkrSSR Ye.B.Babskiy) Instituta
normal'noy i patologicheskoy fiziologii (dir. - desystvietel'nyy chlen ANN SSSR V.V.Parin) AMN SSSR.



BABSKIY, Ye.B., akademik; KARPMAN, V.L.; IVANITSKAYA, I.N.

Normal duration of electric systole in man. Dokl. All SSSR
156 no.6:1472-1475 Je '64. (MIRA 17:8)

1. Institut normal'noy i patologicheskoy fiziologii AMN SSSR.
2. Akademiya nauk UkrSSR (for Babskiy).

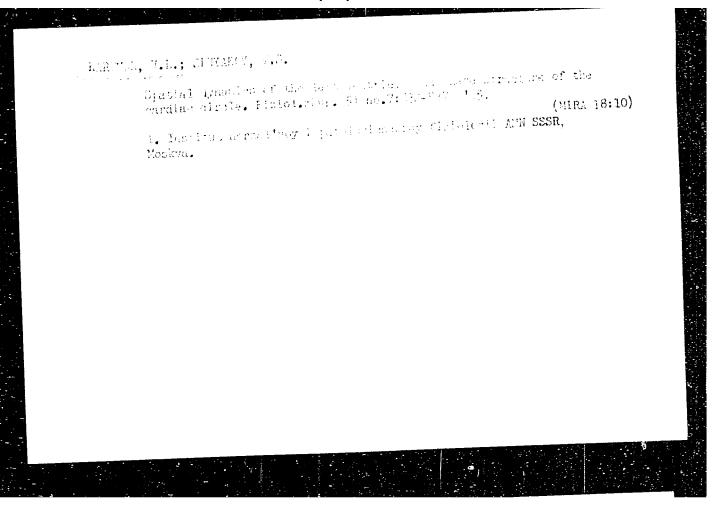
Study of the rate of the spread of the pulse wave in the human acrta. Biul. cksp. biol. i med. 54 no.8:111-114. Ag '62.

1. Iz laboratorii klinicheskoy fiziologii (zav. - akademik AN UkrSSR Ye.B. Babskiy) Instituta normal'nov i patologicheskoy fiziologii (dir. - deys'vitel'nyy chlen ANN SSSR V.V. Parin' AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR V.V. Parinym.

KARPMAN, V.L.

New methods for the study of the cardiovascular system. Vest. AMN SSSR 19 no.2:82-86 '64. (MIRA 18:1)

1. Institut normal'noy i patologicheskoy fiziologii AMN SSSR, Moskva.



RYABIN¹KIY, Bronislav Yakovlevich; ADARYUKOV, G.I., inzh., retsenzent;
BERLYAND, S.S., inzh., retsenzent; GERASIMENKO, V.A., inzh.,
retsenzent; GRUDSKIY, V.A., inzh., retsenzent; DASHEVSKIY,
Ye.B., inzh., retsenzent; KARPMAN, Ya.I., inzh., retsenzent;
KOROLEV, M.N., inzh., retsenzent; KORSAKOV, A.A., inzh.,
retsenzent; LISENKO, T.P., inzh., retsenzent; PEKILIS, I.B.,
retsenzent; REVYAKIN, A.A., inzh., retsenzent;
ROMANOVICH, N.D., inzh., retsenzent; FILIPPOV, S.M., inzh.,
retsenzent; BRUSHTEYN, A.I., red.izd-va; DOBUZHINSKAYA, L.V.,
tekhn. red.

[Planning and the economics of metallurgical plants] Planirovanie i ekonomika metallurgicheskikh zavodov. Izd.3., perer. i dop. Moskva, Metallurgizdat, 1963. 754 p. (MIRA 16:4) (Steel industry--Management)

THROW, E.M.

97

AUTHOR:

Botvinnik, M. M. Dr. Tech. Sci., and E. M. Karpoli, Engineer of the LHV3A 136 Gorodskiy, D.A., Doctor Tech. Sci., and Sazonova, Z.K., Engineer, of the Scientific Research Institute of the Ministry of the

Electrotechnical Industry.

TITLE:

Experimental Investigation of the Operation of Synchronous Machines With Longitudinal-Transverse Excitation (Eksperimental nove issledovaniye raboty sinkhronnoy mashiny s prodol no-poperechnym vozbuzhdeniyem)

PERIODICAL:

Vestnik Flektropromyshlernosti, 1957, No.2, pp.28-31

(U,S.S.R.)

ABSTRACT:

Control of excitation in the longitudinal axis of alternator rotors may be used to improve the stability of transmission lines by transition to the zone of artificial stability when the angle is greater than 90°. However, the effect of longitudinal excitation alone is much reduced when () 120°. This limits power

Card 1/4

97

TITLE:

Experimental Investigation of the Operation of Synchronous Machines With Longitudinal-Transverse Excitation (Eksperimental'noye issledovaniye raboty sinkhronnoy mashiny s prodol'no-poperechnym vozbuzhdeniyem)

transmission to a distance of approximately 1500 km. If longitudinal and transverse excitation are both used on the principle suggested by A.A. Gorev, in which field winding receives in the longitudinal axis a signal proportional to sin and in the transverse axis one proportional to cos and in the transverse axis one proportional to cos and in the transverse axis one proportional to cos and in the transverse axis one proportional to cos and in the transverse axis one proportional to cos and in the transverse axis one proportional to cos and in the transverse axis one proportional to cos and in the transverse axis one proportional to cos and in the transmission of the system. With this removes the limitation on the transmission distance and increases the stability of the system. With this method of control the machine may operate normally when the rotor is not in synchronism, but is slipping slightly. After a brief presentation of the mathematics of the problem, test results are given which confirm that the alternator can operate stably with the rotor out of synchronism. The alternator

Card 2/4

97

TITLE:

Experimental Investigation of the Operation of Synchronous Machines With Longitudinal-Transverse Excitation (Eksperimental noye issledovaniye raboty sinkhronnoy mashiny s prodol no-poperechnym vozbuzhdeniyem)

set can take up a load while gaining speed and the rate of establishing normal operation depends only on the machine. The generator is connected to the system with no synchronizing devices; it can also work as, a synchronous condenser if necessary.

The article contains 4 sets of photographs; there are no references.

Card 3/4

97

TITLE:

Experimental Investigation of the Operation of Synchronous Machines With Forgitudical-Transverse Exsitation (Exsperimental Incys is aledoranty enaboty sinkhronney mashiny a protoline-popula bown vorburhieniyem)

Tyen

ASSOCIATION: [see above under author]

PRESENTED BY:

SUBMITTED:

AVAILABLE:

Library of Congress

Card 4/4

EYGENSON, A.S.; UL'YANOV, A.I.; VARFOLOMEYEVA, Ye.M.; VOROB'YEV, M.F.; KARPONOSOVA, R.M.

Laboratory method for determining the content of salts in petroleums. Khim. i tekh.topl. no.11:60-64 N 156. (MLRA 9:11)

1. Ufimskiy neftepererabatyvayushchiy zavod. (Petroleum-Analysis)

ANDERS, V.R.; NESTEROV, B.A.; PIKEL'NER, G.A.; VARFOLOMEYEVA, Ye.M.; KARPONOSOVA, R.M.

Apparatus for continuous determination of the salt content of desalted petroleum. Khim. i tekh.topl. i masel 4 no.3:21-22 Hr 159. (MIRA 12:4)

1. Spetsial nove konstruktorskove byuro po avtomatizatsii neftepererabotki i neftekhimicheskikh proizvodstv i Ufimskiy neftepererabatyvayushchiy zavod.

(Petroleum--Analysis)

Device for towing ferry boats by the pushing method. Voen.-inzb.
shur. 101 nc.5:20-22 My '57.
(Ferrica)

RARPOV, A.

Buzanov, S. and Karpov, A. "Current slope-gradings and their designing,"

Zh.-d. transport, 1948, No. 12, p. 23-29

SO: U-3264, 10 April 53 (Letopis 'Zhurnal 'nykh Statey, No. 4, 1949).

KARPOV

RUMANIA/Analytical Chemistry. Analysis of Organic Compounds.

Abs Jour: Ref Zhur-Khimiya, No 21, 1958, 70640.

Author : Fishel, Modryanu, Karpov

: Paper Chromatography of Isothiocyanates. Communi-Inst

cation I. The separation and Identification of Title Certain Isothiocyanates in the Form of Reaction

Products With 2,4-Dinitrophenyl Hydrazine (Thiosemi-

carbazides).

Orig Pub: Studii si cercetari stiint. Acad. RFR Fil. Iasi.

Chim., 1956 (1957), 7, No 2, 19-23.

Abstract: A method was developed for the chromatographic separation and determination of allyl-, phenyl-, o-, m-, and p-tolyl-, X and B -naphtyl isocya-

nates. The method is based on the utilization of

: 1/2 Card

19

CIA-RDP86-00513R000720830002-9" APPROVED FOR RELEASE: 06/13/2000

RUMANIA / Analytical Chemistry--General.

E-1

Abs Jour

: Referat Zhur--Khimiya, No. 11, 1959, 38259

Author

: Modreanu, F.; Fishel, S.; and Karpov, A.

Inst

: Rumanian Academy of Sciences

Title

: On the Problem of the Formation of Multiple Spots During Paper Chromatography With Two

Competing Anional

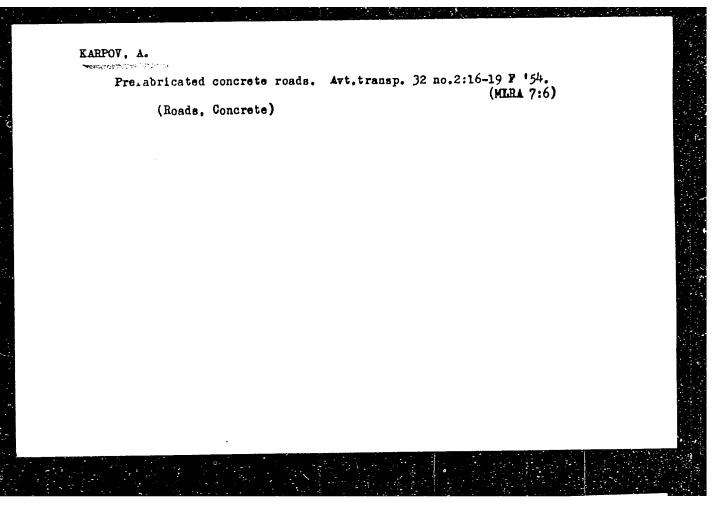
Orig Pub

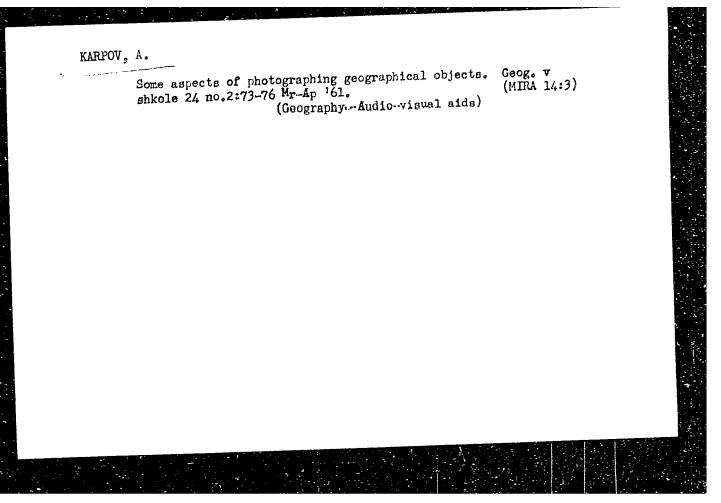
: Studii si Cercetari Stiint Acad RPR Fie Iasi Chim, 8, No. 2, 259-276 (1957) (in Rumanian with French and Russian summaries)

Abstract

: The authors give a detailed discussion of the problem of the appearance of several spots or of diffuse tails (comets) during the paper chromatography of metal ions deposited on the paper in the form of their salts. It has been found that when the solvent wood consider and a solvent wood consider a solvent wood consideration and the solvent wood conside when the solvent used consists of a mixture of

Card 1/3





KARPOV, A., inzh.

New building materials. Zhil. stroi. no.l:32 '65.

(MIRA 18:3)

KARPOV, A.A.

Category: USSR / Diseases of Farm Animals and Diseases Caused by Helminths V-3

Abs Jour: Refer. Zhur-Biologiya, No 16, 1957, 72310

Author : Karpov A. A. Fedotov N. S.

Inst : Not given

Title : Onchocercosis in Horses and its Relation to the Withers.

Orig Pub: Sb. Nauch. Tr. Ivanovsk. S. Kh. In-ta, 1956, Vyp. 13, 148-149

Abstract: In 43 horses under investigation, onchocercosis was discovered in

55.8 percent. No diseases of withers were disclosed, which in the opinion of the authors is due to the good care and feeding of the

animals with avoidance of overwork.

Card : 1/1

-1-

FEDOTOV, N. S. (Professor). KARPOV, A. A. and OVCHINNIKOV, M. S. (Veterinary doctors, Ivanovo Oblast' Veterinary Polyclinic).

"Periodic irrigation of the frontal sinus of cattle"...

Veterinariya, vol. 39, no. 8, August 1962 pp. 53

KARPOV, A.A., veterinarnyy vrach

Using aminazine in the anesthesia of dogs. Sbor. nauch. trud. Ivan. sel'khoz. Inst. no.19:274-277 '62. (MIRA 17:1)

1. Ivanovskaya oblastnaya veterinarnaya poliklinika (dir.-veterinarnyy vrach F.I. Troitskiy).

EPA(s)-2/ENT(n)/EPF(c)/EPR/EMP(j)/T/EMA(o) Pc-L/Pr-L/Ps-L/Pt-10 L 33538-65 RPL WW/RM 8/2982/64/000/051/0043/0047 ACCESSION NR: AT5006930 AUTHOR: Paushkin, Ya. M.; Lunin, A. F.; Karpov, A. A. TITLE: Homopolycondensation of urea to polycyanamide SOURCE: Moscow. Institut neftekhimicheskoy i gazovoy promyshlennosti. Trudy, no 51, 1964. Neftekhimiya, neftekhimicheskiye protsessy i neftepererabotka (Petroleum chemistry, petrochemical processes and oil refining), 43-47 TOPIC TAGS: polycyanamide synthesis, urea polymerization, homopolycondensation reaction, zinc chloride catalyst ABSTRACT: A semiconducting thermally stable, polycyanamide was prepared from urea by the reaction which proceeded in a single step during heating of urea at 300-500C with zinc chioride Equimolar amounts or urea and ZnCi, gave optimum yields; the yield increased with reaction time and the viscosity of the polymers in sulfuric acid solution increased with 1/2 Card

L 33538-65			
ACCESSION NR: AT5006930			17.75
condensation temperatures. T soluble in formic or sulfuric a structure was confirmed by de volumetric determination of an EPR spectroscopy indicated the art. has: 4 figures, 1 table an	termination of the amine nun nino nitrogen, and by elemen	ober, by diazonzania and	
ASSOCIATION: Institut neftekh chemical and gas industry insti			
SUBMITTED: 00	ENCL: 00	SUB CODE: OC GC	
SUBMITTED: 00 NO REF SOV: 004	ENCL: 00 OTHER: 002	SUB CODE: OC,GC	
		SUB CODE: OC G&	

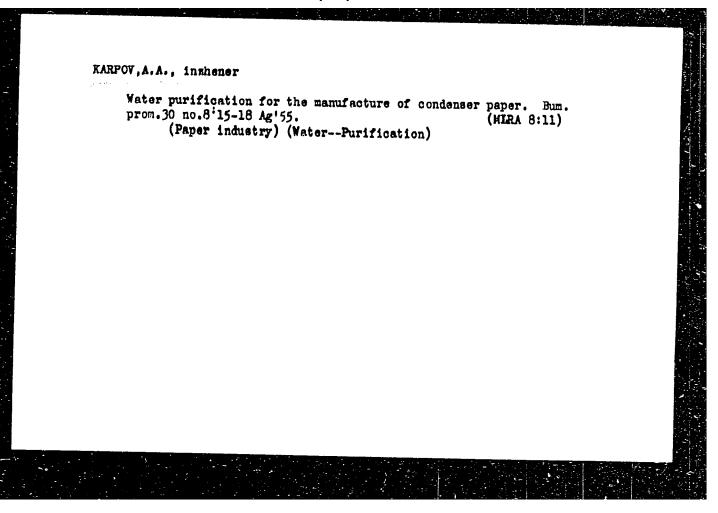
KARPOV, A.A., inzhener.

Method of determining the quality of fresh industrial water. Bum.prom. 29 no.10:23 0 154. (MLRA 7:11)

1. Orgenergobum.
(Water--Analysis)

Card 1/1 :

111



KARPOV, A.A., inzh.; KUSTOBAYEV, G.G., inzh.; IAUSHKIN, N.P., inzh.;

IAMCE, Z.I., inzh.; NCSYREVA, M.D., inzh.; SAVEL'EV, G.V., inzh.;

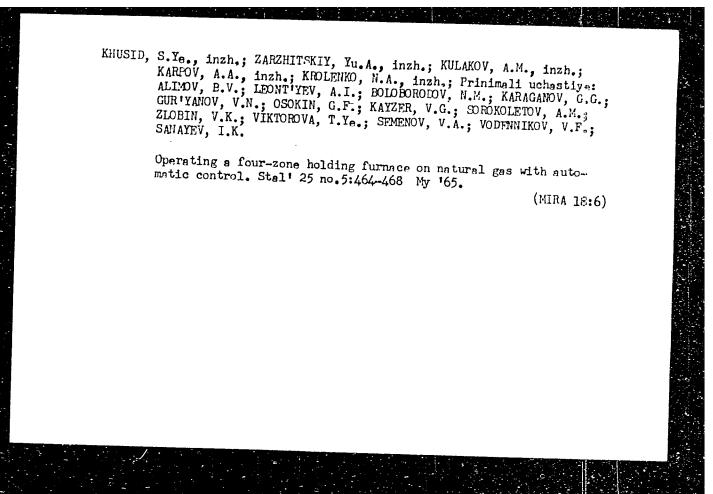
SHCHULEFNIKOV, I.S., inzh.; Prinimali uchastiye: SYCHKOV, B.A., inzh.;

MILIKHIN, A.Ye., inzh.; ZAYTSEV, R.A., inzh.; ZARZHITSKIY, Yu.A.,
inzh.; IEONT'EV, A.I., inzh.; VIKTOROVA, T.Ye., inzh.; SERIKOV, A.A.,

Operation of recuperator soaking pits in the 1150 NAK rolling
mill. Stal' 22 no.8:753-758 Ag '62. (MIRA 15:7)

1. Magnitogorskiy metallurgicheskiy kombinat.

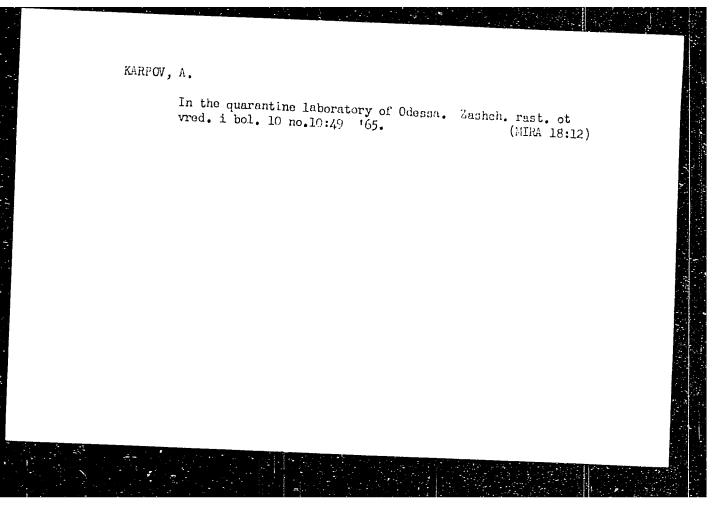
(Furnaces, Heating) (Rolling mills)

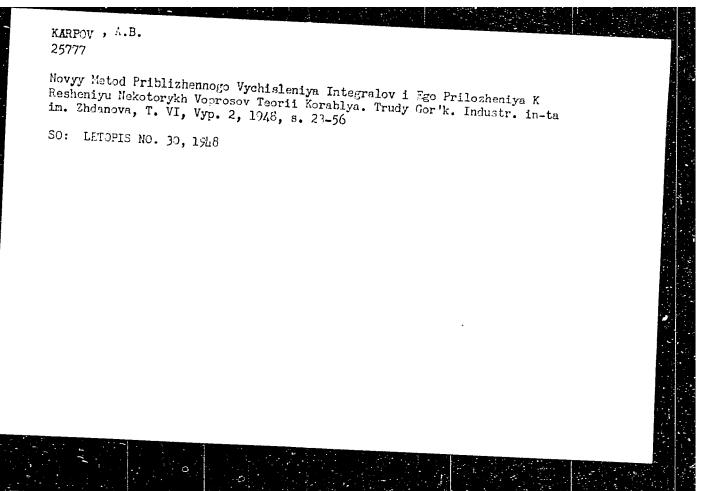


PORTNOV, A.A., kand. tekhn. nauk; KARPOV, A.A., inzh.; LEOMI'YEV, A.I., inzh.; LEONT'YEVA, T.S., inzh.

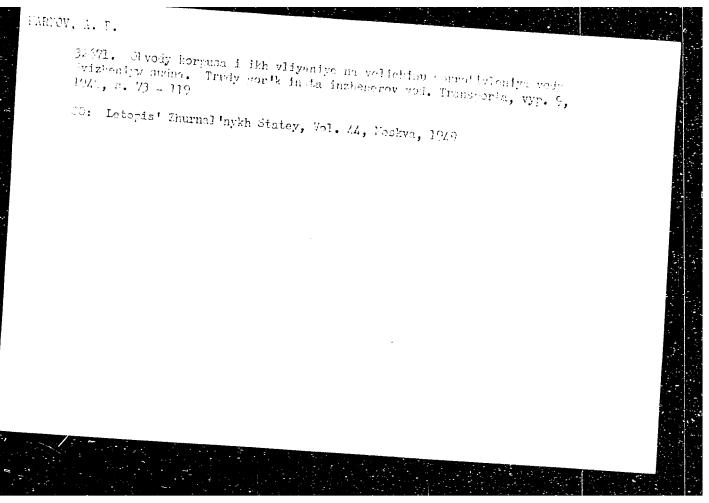
Study of an experimental compartment furnace during the heating of square billets. Stal' 25 no.4:370-372 Ap '65.

(MIRA 18:11)





WThe analytical method of designing structures according to the ship's frame." Truly Gor'k, industr. in-ta im. Zhdanova, Vol. VII, Issue 2, 1948, p. 25-1
SO: U-2650, 16 June 53. (Letopis 'Zhurnal Anykh Statey, No. 5, 1949).



Stability of Ships						
Russian scientists - flot 13, No. 2, 1953	originators of the	theory (concerning	the rocking	of ships.	Mor.
			•			
		•				
	ussian Accessions,					

MARPOV, A., kandidat tekhnicheskikh nauk.

Testing the unsinkability of ships. Mor. i rech.flot 14 no.10:
13-17 0 '54.

(Naval architecture)

MERA 7:11)

SOV/124-58-10-11196

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 10, p 71 (USSR)

AUTHOR: Karpov, A.B.

The Practice of Constructing Quadrature Formulas for Shipbuilding TITLE:

Design Calculations (Opyt konstruirovaniya kvadraturnykh formul

dlya korablestroitel'nykh raschetov)

Tr. Nauchno-tekhn. o-va sudostroit. prom-sti, 1957, Vol 7, Nr PERIODICAL:

2, pp 183-204

ABSTRACT: The author proposes the introduction of two new quadrature form-

ulas into the process of shipbuilding design calculations. The first is constructed along the lines of the Chebyshev formula and takes the specific pecularities of shipbuilding design curves into account. Integration is performed separately for the region of the cylindrical insert and for the ends of the ship. Formulas are obtained for the calculation of areas, static moments of areas and volumes, moments of inertia, and the theoretical elements of the ship. The second formula has been worked out for use with equispaced ordinates and is a gen-

eralization of the "Kotes" formula for the case of an arbitrarily

chosen point of contact of the boundary curve and the axis of the Card 1/2

SOV/124-58-10-11196

The Practice of Constructing Quadrature Formulas for Shipbuilding (cont.)

abscissae. Because of this there is no necessity of introducing reduced or intermediate ordinates into the calculation. This formula affords a possibility of performing the calculations by subdividing the design length of the ship into 10 or 20 equal sections. The author illustrates the application of the formula to the calculation of waterline area elements, the submerged portion of the frame, water displacement, and the abscissa and ordinate of the center of volume.

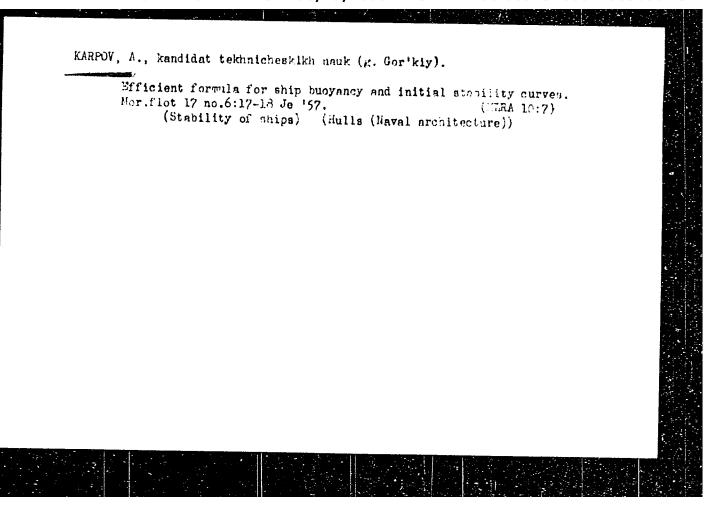
A.N. Kholodilin

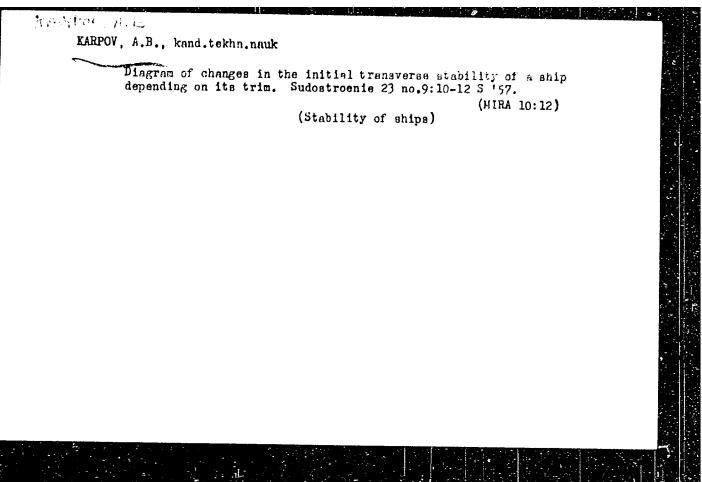
Card 2/2

KARPOV, A.B., kand.tekhn.nauk

Calculations on increased draft of vessels during navigation in shallow waters. Rech.transp. 16 no.8:16-18 Ag '57. (MIRA 10:11)

(Displacement (Ships))





KARPOV A.B

137-58-6-11498

Translation from: Referativnyy zhurnal, Metallurgiya, 1958. Nr 6, p 35 (USSR)

AUTHORS: Kostyukov, A.A., Karpov, A.B.

TITLE: An Investigation of the Phase Diagram of the Ternary System

Sodium Fluoride - Aluminum Fluoride - Magnesium Fluoride (Issledovaniye diagrammy sostoyaniya troynoy sistemy ftoristyy

natriy-ftoristyy alyuminiy-ftoristyy magniy)

PF NODICAL: Tr. Leningr. politekhn. in-ta, 1957, Nr 188, pp 58-66

ABSTRACT: The methods of thermal analysis and microstructural anal-

ysis are used to study the following binary systems:
1) NaF-MgF₂; 2) MgF₂-AlF₃; 3) Na₃AlF₆-MgF₆;

4) Na₃AlF₆-Na MgF₃; and 5) NaMgF₃-AlF₃. Systems (1) and (2) are binary accessory systems, while (3), (4), and (5) are sections of the ternary system NaF-AlF₃-MgF₂, a study of which is necessary to clarify the effectiveness of addition of MgF₂ to the electrolyte during Al refining to reduce the m.p. of the electrolyte, to develop crystal-optical methods of monitoring

the composition of the electrolyte in Al baths when MgF₂ is used as an addition, and to clarify the chemical reaction among

Card 1/2 the starting components. It is shown that 1) Na₃AlF₆-MgF₂ and

137-58-6-11498

An Investigation of the (cont.)

NaMgF₃-AlF₃ are not binary systems. The phase diagrams of these systems reveal branches of primary crystallization of the products of exchange between the starting components; 2) the ternary system NaF-AlF₃-MgF₂ is divided by the Na₃AlF-NaMgF₃ secant into 2 secondary systems: the ternary system NaF-Na₃AlF₆-NaMgF₃ and the ternary reciprocal salt-pair system Na₃AlF₆+3MgF₂ 3NaMgF₃+AlF₃; 3) the metastable diagonal sections Na₃AlF₆-MgF₂ and NaMgF₃-AlF₃ of this reciprocal salt-pair system testify to the state of equilibrium of the exchange reactions Na₃AlF₆+3MgF₂ 3NaMgF₃+AlF₃ in the melt, belonging to the class of reversible reciprocal salt-pair systems.

N.P.

1. Halogen fluorides--Microstructure 2 Halogen fluorides--Thermodynamic--Properties 3. Halogen fluorides--Exchange reactions 4. Electrolytes--Performance 5. Aluminum

Card 2/2

Quadrature formulas in shipbuilding computations. Trudy GPI
14 no.1:23-33 '58.

(Naval architecture-Tables, calculations, etc.)

TIKHOMIROV, Nikolay Alekseyevich; OBERTINSKAYA, T.V., retsenzent;
NOVIK, R.I., retsenzent; KARPOV, A.B., dotsent, retsenzent,
red.; KAN, P.M., red.izd-va; YERMAKOVA, T.T., tekhn.red.

[Ship propulaion] Khodkost' audna. Moskva, Izd-vo "Rechnoi
transport," 1959. 198 p.

(Ship propulsion)

(Ship propulsion)

Operational methods of calculating buoyancy, stability and unsinkability of ships. Trudy GPI 15 no.1:31-53 '61 [i.e. '59].

(Stability of ships) (Hulls (Naval architecture))

KARPOV, A.B., kand. tokhn. nauk

Parametric method in naval architecture. Trudy GPT 19
no.2:5-20 '63. (MERA 17:10)

KARPOV, A.B.; YAKOVLEV, M.S., inzh., otv. red.; KOZYULINA, R.M., red.

[Some problems in bacyana; and stability calculations; textbook for students of the Faculty of Shipbuilding]

Nekotorya voprosy raschetov plavuchesti i estotchivosti; uchebnoe pusobie dlia studentov korablestroitel'nogo fakul'tets. Gor'kii, Ger'kovskii politekha. in-t, 1961. 122 p.

(MinA 18:4)

VAGANOV, Anatoliy Maksimovich; KAMFOV, Andrey Borisovich;
VINOGRADOV, I.V., dots., retsenzent; MIKHEYEV, V.V.,
nauchn. red.; SHAKHNOVA, V.M., red.

[General construction of ships] Obshchee ustroistvo sudov.
Leningrad, Sudostroenie, 1965. 267 p. (MIRA 18:7)

1. Leningradskiy korablestroitel'nyy institut (for
Vinogradov).